

APPLICANT(S): BIRK, Yitzhak et al.
SERIAL NO.: 09/486,225
FILED: May 22, 2000
Page 6

REMARKS

The present response is intended to be fully responsive to all points of objection and/or rejection raised by the Examiner and is believed to place the application in condition for allowance. Favorable reconsideration and allowance of the application is respectfully requested.

Applicants assert that the present invention is new, non-obvious and useful. Prompt consideration and allowance of the claims is respectfully requested.

Status of Claims

Claims 1, 2, 4 and 7-9 and 12-18 are pending in the application. Claims 1, 2, 4 and 7-18 have been rejected, even though claims 10 and 11 were cancelled in the previous amendment.

CLAIM REJECTIONS

35 U.S.C. § 103 Rejections

In the Office Action, the Examiner rejected claims 1, 4, and 7-9 under 35 U.S.C. § 103(a), as being unpatentable over Yiu (US Pat. 6,008,777) in view of Ling et al. (US Pat. 6,172,970) and further in view of Koller (US Pat. 3,569,977).

Applicants respectfully traverse the rejections because a prima facie case of obviousness has not been established.

Applicants agree with the Examiner, in section 3, page 4, lines 20-21, that "The modification of Yiu in view of Ling still lacks a multi-polarization transmission antenna." However, Applicants disagree that the addition of Koller makes the present invention obvious. Whether or not Koller describes a multi-polarization antenna (as argued in the previous Response), there is no teaching in Yiu of the need for any particular type of antenna and certainly not for as complex an antenna as a multi-polarization antenna. Moreover, there is no teaching in Koller to indicate the usefulness of his type of antenna to an indoor environment.

APPLICANT(S): BIRK, Yitzhak et al.
SERIAL NO.: 09/486,225
FILED: May 22, 2000
Page 7

Yiu does not mention antennas at all. Instead, Yiu discusses the presence of "wireless links" 117, 119, 217, etc. The closest Yiu comes is his discussion of transceiver circuitry 243:

"... that transmits the RF signal to the TV interface unit through a wireless link 217. Transceiver 243 is also configured to receive a remote input signal through a second wireless link 219, which may originate from another room, such as for example the family room or living room. In one embodiment of the present invention, the remote input signal carried by wireless link 219 includes a data stream that may include multiplexed remote input signals, which include for example a remote keyboard signal, a remote mouse signal, a remote trackball signal, a remote joystick signal, a remote game controller signal or the like." (col. 4, lines 54 – 65)

Nowhere in that discussion, or elsewhere in the patent, does Yiu discuss the qualities required of his various wireless links. Clearly, Yiu plans to use a standard transceiver for his wireless link.

Applicants, on the other hand, understood the difficulties posed by wireless transmission of signals within a structure, as stated:

"The most challenging problem to this end is carrying the high-bandwidth signal containing the video and audio information from the computer to the television set and, possibly, in the other direction."

The difficulties posed by wireless transmission of signals within a structure include the lack of line of sight between transmitter and receiver, and wall obstacles, as described by Applicants:

"The invention relates to the transmission and reception of an analog high-bandwidth composite video signal from a computer to a television set through a medium, such as a building, that typically does not offer line of sight between transmitter and receiver." (page 8, lines 2 – 5)

"Typically, the walls 14, 16 and 17 of the building severely affect the transmitted signal, labeled 30, resulting in multiple copies of the signal. Fig. 1

APPLICANT(S): BIRK, Yitzhak et al.
SERIAL NO.: 09/486,225
FILED: May 22, 2000
Page 8

shows three copies, labeled 32, 34 and 36, all of which differ in the polarization, intensity, phase and angle at which they arrive to the reception antenna 24.

"A signal transmitted indoors in one or more directions undergoes an unpredictable sequence of reflection, refractions, scattering and diffraction as it goes through or is redirected by various obstacles and materials. For example, wall 14 causes diffraction, wall 16 minimally causes reflection and wall 17 causes refraction. As a result, the signal arriving at the receiver antenna comprises a set of signals, some of which may have gone through different paths, and thus arrive after different delays, some of whose phase is altered due to reflections or other phenomena, and all of whom have different amplitudes." (page 8, lines 19 – 30)

A situation may therefore arise wherein

"Since antennas are generally built to have a single polarization, if the changes in polarization of the transmitted signal are such that the polarization is completely changed, it is possible that an antenna placed in the wrong position might not receive any signal" (page 9, lines 14 – 17)

This situation is not suggested nor taught in Yiu. And, accordingly, there is no teaching in Yiu towards Applicants' solution to this situation. The fact that the Examiner found art describing similar parts to those used by Applicants for their invention does not make Applicants' invention obvious. There is no teaching from one piece of art to the other.

As discussed above, Yiu does not describe the qualities he requires of his wireless links; he merely utilizes transceiver 243 to generate the link. Applicants have no such transceiver. Instead, as recited in claim 1, Applicants chose to use the combination of "a multi-polarization transmission antenna unit;" and "a reception antenna unit, located away from said transmission antenna unit, having at least one set of two, differently polarized reception antennas for receiving said transmitted signal". Yiu does not require such a combination, nor does Yiu teach that anything other than a transceiver is required.

APPLICANT(S): BIRK, Yitzhak et al.
SERIAL NO.: 09/486,225
FILED: May 22, 2000
Page 9

Moreover, Koller teaches away from such a strange combination of antennas. Koller teaches that his antenna should be used as a transceiver at either end of the communication link:

“Also, it should be understood that while one winding can be operating on the right-hand circularly polarized pattern, the other winding could be receiving left-hand circularly polarized signals, thus making the antenna extremely desirable for use with earth orbiting satellites, for example, where one ground station would radiate right-hand circularly polarized waves to be detected by the right-hand circularly polarized antenna on the satellite, to trigger a left-hand circularly polarized signal from the satellite to be received at the left-hand circularly polarized antenna on the earth. This can be achieved in compact relationship on the single antenna structure.” (col. 2, lines 27 – 39)

Moreover, as the above quotation indicates, Koller conceived of his antenna as operating across space and not in the confinement of a building. Thus, Koller does not teach towards Yiu, as it is not designed for indoor operation, nor towards Ling, which teaches an antenna diversity receiver.

Accordingly, there is no prima facie case of obviousness and Applicants request that this rejection be withdrawn.

In the Office Action, the Examiner rejected claim 2 under 35 U.S.C. § 103(a), as being unpatentable over Yiu in view of Ling et al. and Koller as applied to claim 1 and further in view of Hudson (US 5,818,517).

The combination of Yiu, Ling et al., Koller and Hudson does not teach or suggest all the limitations of claim 1, nor does it teach or suggest all the limitations of dependent claim 2. The combination of Yiu, Ling et al. and Koller has been discussed above. That discussion is applicable here. Hudson is also silent as to qualities necessary for transmission within a building and therefore cannot cure the deficiencies of the combination of Yiu, Ling et al. and Koller. Accordingly, Applicants respectfully assert that this rejection should be withdrawn.

APPLICANT(S): BIRK, Yitzhak et al.
SERIAL NO.: 09/486,225
FILED: May 22, 2000
Page 10

In the Office Action, the Examiner rejected claim 12 under 35 U.S.C. § 103(a), as being unpatentable over Yiu in view of Ling et al. and Koller as applied to claim 7 and further in view of Bergins (US Pre Grant Pub 2003/0186706).

The combination of Yiu, Ling et al., Koller and Bergins does not teach or suggest all the limitations of claim 7, nor does it teach or suggest all the limitations of dependent claim 12. The combination of Yiu, Ling et al. and Koller has been discussed above. That discussion is applicable here. Bergins is also silent as to qualities necessary for transmission within a building and therefore cannot cure the deficiencies of the combination of Yiu, Ling et al. and Koller. Accordingly, Applicants respectfully assert that this rejection should be withdrawn.

In the Office Action, the Examiner rejected claims 13 and 15 - 17 under 35 U.S.C. § 103(a), as being unpatentable over Yiu in view of Ling et al.

Applicants respectfully disagree. As discussed hereinabove, Yiu does not discuss the qualities of his transceivers nor of the wireless channel therebetween and thus, there is no teaching in Yiu towards Applicants' solution to this situation. The addition of Ling does not help.

While Ling may show antennas with multiple diversity plans, one of which is polarization diversity, Ling's antennas are designed for cellular telephone systems. Moreover, Ling's Abstract states: "The receiver is capable of selecting a diversity scheme which is anticipated to give optimum signal reception among a plurality of diversity schemes installed on the receiver". Such a plurality of schemes is necessary for a cellular telephone system which must receive signals in many types of environments.

Claim 13 does not recite a cellular telephone system. But it does recite the reception antenna which Applicants consider appropriate to "a system which transmits the output of a computer to a television set via wireless channel within a building" (claim 13). The need for such

APPLICANT(S): BIRK, Yitzhak et al.
SERIAL NO.: 09/486,225
FILED: May 22, 2000
Page 11

a reception antenna is not discussed in Yiu and Ling's reception antenna is not appropriate for Yiu's system.

Accordingly, there is no prima facie case of obviousness and Applicants request that this rejection be withdrawn.

In the Office Action, the Examiner rejected claim 14 under 35 U.S.C. § 103(a), as being unpatentable over Yiu in view of Ling et al. as applied to claim 13 and further in view of Hudson.

The combination of Yiu, Ling et al., and Hudson does not teach or suggest all the limitations of claim 13, nor does it teach or suggest all the limitations of dependent claim 14. The combination of Yiu and Ling et al. has been discussed above. That discussion is applicable here. Hudson is also silent as to qualities necessary for transmission within a building and therefore cannot cure the deficiencies of the combination of Yiu and Ling et al. Accordingly, Applicants respectfully assert that this rejection should be withdrawn.

In the Office Action, the Examiner rejected claim 18 under 35 U.S.C. § 103(a), as being unpatentable over Yiu in view of Ling et al. as applied to claim 15 and further in view of Bergins.

The combination of Yiu, Ling et al., and Bergins does not teach or suggest all the limitations of claim 15, nor does it teach or suggest all the limitations of dependent claim 18. The combination of Yiu and Ling et al. has been discussed above. That discussion is applicable here. Bergins is also silent as to qualities necessary for transmission within a building and therefore cannot cure the deficiencies of the combination of Yiu and Ling et al. Accordingly, Applicants respectfully assert that this rejection should be withdrawn.

APPLICANT(S): BIRK, Yitzhak et al.
SERIAL NO.: 09/486,225
FILED: May 22, 2000
Page 12

Accordingly, Applicants respectfully assert that independent claims 1 and 13 are allowable. Claims 2, 4, 7 - 9, 12 and 14 - 18 depend, directly or indirectly, from claims 1 and 13 and therefore include all the limitations of those claims. Therefore, Applicants respectfully assert that claims 2, 4, 7 - 9, 12 and 14 - 18 are likewise allowable. Accordingly, Applicants respectfully request that the Examiner withdraw the rejections to independent claims 1 and 13 and to claims 2, 4, 7 - 9, 12 and 14 - 18 dependent thereon.

In view of the foregoing amendments and remarks, the pending claims are deemed to be allowable. Their favorable reconsideration and allowance is respectfully requested.

Should the Examiner have any question or comment as to the form, content or entry of this Amendment, the Examiner is requested to contact the undersigned at the telephone number below. Similarly, if there are any further issues yet to be resolved to advance the prosecution of this application to issue, the Examiner is requested to telephone the undersigned counsel.

Petition For One-Month Extension Of Time Under 37 CFR 1.136(a)

The period for responding to the instant Office Action was set to expire on December 7, 2005. Applicant hereby requests that the period for responding to the instant Office Action be extended by one (1) month, so as to expire on January 7, 2006, which, being a Saturday, is extended to January 9, 2006. Accordingly, this response is being timely filed. The fee for a Petition for a One-Month Extension of Time is Sixty Dollars (\$60.00) dollars for a small entity.

Payment Authorization

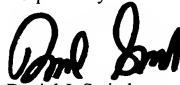
The United States Patent and Trademark Office is hereby authorized to charge Deposit Account Number 501380 in the amount of Sixty Dollars (\$60.00) in connection with the above petition. No additional fees are believed due. However, the United States Patent and Trademark Office is hereby authorized to charge Deposit Account Number 501380 any amount which is

APPLICANT(S): BIRK, Yitzhak et al.
SERIAL NO.: 09/486,225
FILED: May 22, 2000
Page 13

necessary in connection with the filing of this amendment and petition.

Favorable action on this amendment and petition is courteously solicited.

Respectfully submitted,



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